



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,043	08/09/2001	John Franklin Ebersole	16805-00035	4734

7590 06/05/2003

Mirick O'Connell  
DeMallie & Lougee, LLP  
Suite 1700  
100 Front Street  
Worcester, MA 01608-1477

EXAMINER

MENGISTU, AMARE

ART UNIT	PAPER NUMBER
----------	--------------

2673

DATE MAILED: 06/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/927,043

Applicant(s)

EBERSOLE ET AL.

Examiner

Amare Mengistu

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "**stereoscopic view**"; must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1- 4,7,8,9,11,13,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over) Zhang (6,476,391) in view of. Kiernan (5,541,579

4. As to claims 1-4,7,8,9,11,13,15 Zhang teaches an augmented reality display device comprising: a self contained breathing mask (fig.2)); a head mounted display (fig.1) and a head mounted camera (fig.1 (20), fig.2 (2a)); the head mounted display a see thought (col.2, lines 12-13,); a mirror to see the camera view point (fig.1 (32)) which is mounted on a mounting plate (fig.2 (32a)); a headphone (fig.1 (46)). Zhang did not

Art Unit: 2673

explicitly disclose a motion tracker. Kiernan is cited to teach that is well known for a self contained breathing mask to have a motion tracker (see, fig.11 (94)).

5. Therefore, it would have been obvious to one skill in the art at the time of the invention was made to have been motivated to use the motion tracker system of Kiernan into the device of Zhang, because this will allow the camera to detect the movement of the user in order to take a video image of the surrounding to display the information.

6. As to shaft to connect to the head phone to the SCBA; It would have been obvious to one skill in the art to recognize that head phone of Zhang must be connect to SCBA in order to be stable to the ear. It is also well known to use some kind of protection for the mirror from damage.

7. Claims 5,6,10,12,14 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang in view of Kiernan further in view of Waldren (4,884,219)

8. As to claims 5,6,10,12,14 and 16 Zhang teaches a head mounted display having a camera, but failed to teach the camera to generate a stereoscopic view. Waldren clearly teaches that it is conventional for a head mounted display to generate a stereoscopic view (col.2, lines 24-34) and the mirror to set the camera viewpoints more closely coincide with the wearer's eye (see, fig. 1 (32) is closely coincide with the eye of the viewer). Therefore, it would have been obvious to one skill in the art at the time of the invention was made to have incorporated the method stereoscopic viewing as taught by Waldren into the system of Zhang, since this will allow the operator can view a realistic three dimensional effect.

Art Unit: 2673

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amare Mengistu whose telephone number is (703)305-4880. The examiner can normally be reached on M-F,T-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703)305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-9600.

  
Amare Mengistu  
Primary Examiner  
Art Unit 2673

A.M  
June 2, 2003